

Split

Work Order ID 69713 - 2



Tuesday, May 17, 2011 2:48:53 PM

Item ID: D2893-1

Accept



Setup Start



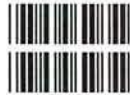
Revision ID:

Item Name: 2.75 Support

Stop



Start Date: 5/17/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 20.00

Customer:

Reference:

Approvals:

Process Plan:

Date: 11-05-11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D2893

Rev B

100

0.00



HAAS CNC VERTICAL MACHINING #1

0.00

HAAS 1

Memo

HAAS CNC vertical machine #1

Machine as per Folio FA081 Tumble & Deburr

11/06/01

15

110

0.00



QC2- Inspect parts off machine FAI/FAIB

0.00

QC

Memo

Quality Control

11/06/06

15

120

0.00



QC8- Inspect parts - second check

0.00

QC

Memo

Quality Control

11/06/07

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 69713

Tuesday, May 17, 2011 2:48:53 PM



Page 2

Item ID: D2893-1

Accept



Setup Start



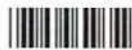
Revision ID:

Stop



Item Name: 2.75 Support

Start Date: 5/17/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 20.00



Customer:

Reference:

Run Start



Approvals: Process Plan: Date: Tooling: Date:

Stop



QC: Date: SPC (Y/N): Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

Mask Inside Bore for Primming ☐ START TIME: 3:40

☐ OVEN TEMPERATURE: ☐ FINISH

TIME: 4:10

140

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

150

SprayPaint

0.00



SprayPaint

Memo

0.00

Spray Painting

Prime inside surface as per Dwg D2893 and QSI 005 4.3

15x d m-f 11/06/07

15 d M 11/06/08

m 11 06 09 (15)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 69713

Tuesday, May 17, 2011 2:48:53 PM



Page 3

Item ID: D2893-1

Accept



Setup Start



Revision ID:

Stop



Item Name: 2.75 Support

Start Date: 5/17/2011 Start Qty: 20.00



Cust Item ID:

Required Date: 6/20/2011 Req'd Qty: 20.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

160

QC14- Inspect Spray Paint

0.00



QC

Memo

0.00

Quality Control

AT 11 06 10 (15)

170

Identify as per dwg & Stock Location: *X-tube Assy*

0.00



Packaging

Memo

0.00

Packaging

MT 11 06 10 (15)

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/6/13 JF  
MF  
11-06-10



W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Tuesday, May 17, 2011 2:49:04 PM

Page 1

Work Order ID: 69713



Parent Item: D2893-1



Parent Item Name: 2.75 Support

Start Date: 5/17/2011


Required Date: 6/20/2011

Start Qty: 20.00

Required Qty: 20.00

## Comments:

IPP: C 02.11.26 Reformat; Added P/O KJ  
IPP D 06.04.19 removed alodine EC  
IPP Rev:E Added priming as per Rev B 07-04-30 JLM  
IPP F 08.03.19 Re-format EC verified by: DD  
IPP Rev:G 08-05-15 add QC14 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK078  D2893-1 TURNING DETAIL		Manufactured	No			100	Each	0.0000	0.5	10			

B69650 X 03

and 11/06/01

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng		Sign & Date			

**NOTE:** Date & initial all entries



DART AEROSPACE LTD		Work Order:	09713
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.989	2.993	2.993	2.993	2.993
AB	0.440	0.460		.458	.450	.450	.495	.445
AC	0.125	0.160		.127	.128	.128	.127	.127
AD	0.040	0.060		.057	.050	.050	.050	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.136	.135	.135	.135	.135
AG	0.140	0.160		.152	.157	.154	.153	.153
AH	1.360	1.400		1.375	1.366	1.366	1.368	1.370
AI	0.040	0.060		.054	.053	.052	.052	.052
AJ	1.190	1.230		1.222	1.210	1.209	1.210	1.212
AK	0.010	0.020		.011	.012	.012	.012	.012
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.520	2.520	2.520	2.520	2.520
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.263	.263	.263	.263	.263
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: *cmf*

Date: 11/06/02

Audited by: *SL*

Date: 11/06/04

Prototype Approval:

Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	<i>[Signature]</i>

DART AEROSPACE LTD		Work Order:	09713
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	27	38	49	810
HAAS Section								
AA	2.985	3.005		2.990	2.990	2.992	2.993	2.990
AB	0.440	0.460		.455	.455	.455	.455	.455
AC	0.125	0.160		.130	.130	.128	.128	.128
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.135	.136	.135	.135	.135
AG	0.140	0.160		.153	.151	.154	.154	.153
AH	1.360	1.400		1.372	1.370	1.368	1.371	1.374
AI	0.040	0.060		.053	.051	.052	.051	.051
AJ	1.190	1.230		1.216	1.216	1.213	1.213	1.221
AK	0.010	0.020		.012	.012	.012	.012	.012
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.520	2.520	2.520	2.520	2.520
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.263	.263	.263	.263	.263
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: amx

Date: 11/06/03

Audited by: SL

Date: 11/06/07

Prototype Approval:

Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	



DART AEROSPACE LTD		Work Order:	69713
Description: Ø2.750 Support		Part Number:	D2893-1
Inspection Dwg: D2893	Rev: B	Page 1 of 1	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

☒ First Article ☐ Prototype

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	15
HAAS Section								
AA	2.985	3.005		2.990	2.991	2.991	2.990	2.991
AB	0.440	0.460		.455	.458	.457	.458	.458
AC	0.125	0.160		.128	.130	.129	.129	.128
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.189	.189	.189	.189	.189
AF	0.125	0.160		.135	.135	.135	.135	.135
AG	0.140	0.160		.153	.153	.152	.152	.151
AH	1.360	1.400		1.373	1.372	1.371	1.373	1.376
AI	0.040	0.060		.057	.050	.053	.054	.052
AJ	1.190	1.230		1.216	1.214	1.216	1.218	1.217
AK	0.010	0.020		.012	.012	.012	.012	.012
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.520	2.520	2.520	2.520	2.520
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.263	.263	.263	.263	.263
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Measured by: AK Date: 11/06/06

Audited by: JL Date: 11/06/07

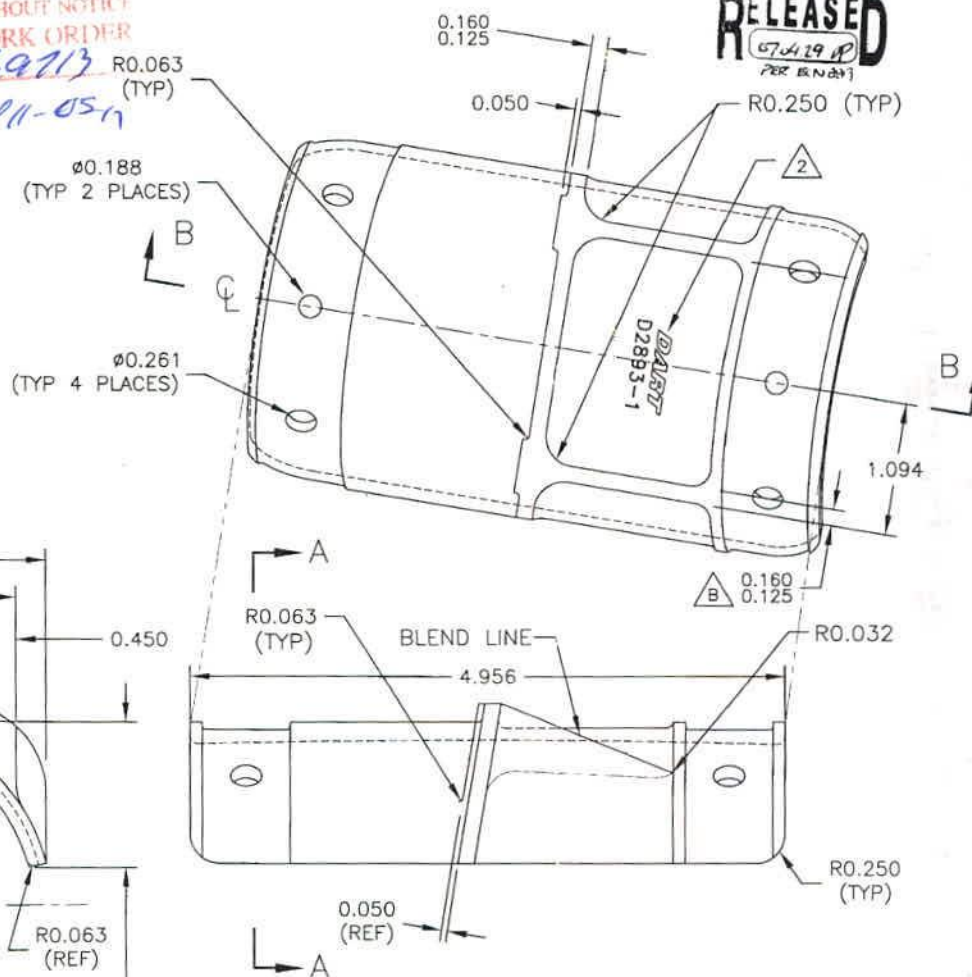
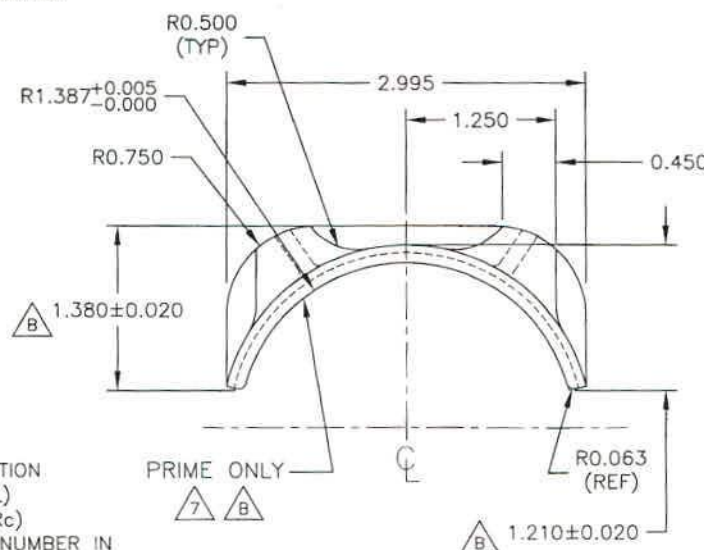
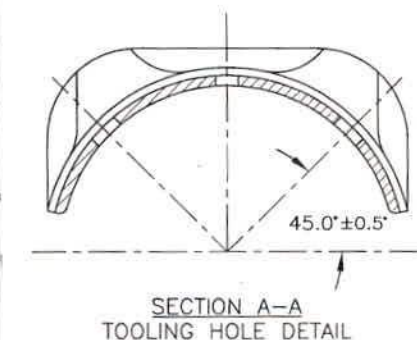
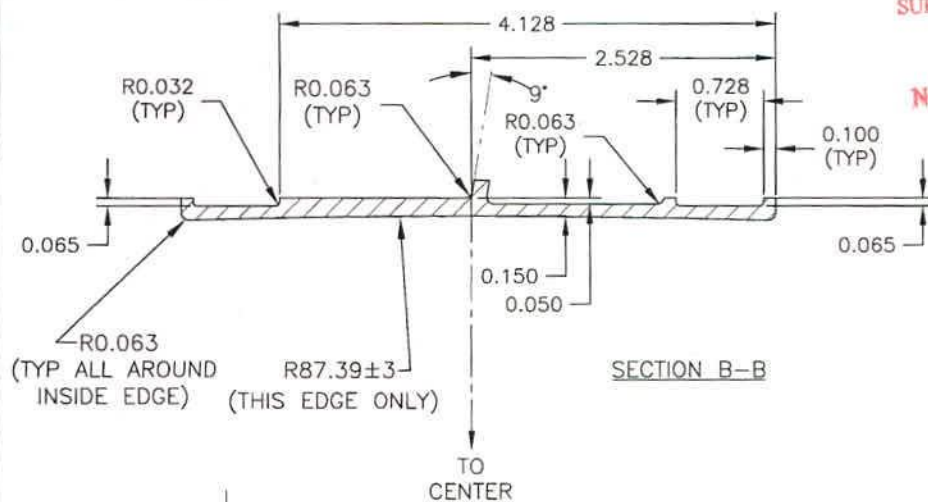
Prototype Approval: \_\_\_\_\_ Date: \_\_\_\_\_

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
WORK ORDER  
NO. *C9213*  
*PR 11-0511*

RELEASED  
67419 P  
PER BUNBY



D2893-1

- 1) MATERIAL: 17-4 PH STAINLESS STEEL  
HEAT TREAT TO H900 CONDITION  
(900°F FOR 1 HR, AIR COOL)  
MIN UTS = 170 KSI (38 HRC)
- 2) IDENTIFY WITH DART LOGO AND PART NUMBER IN  
THIS AREA WITH 0.125 HIGH LETTERING 0.010-0.020 DEEP
- 3) BREAK ALL UNMARKED SHARP EDGES 0.010 TO 0.020
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES
- 7) FINISH: POWDER COAT WHITE (REF. 4.3.5.2) PER DART QSI 005 4.3  
PRIME INSIDE SURFACE AS SHOWN PER DART QSI 005 4.2

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OR COPIED OR COMMUNICATED TO ANY OTHER  
PERSON WITHOUT WRITTEN PERMISSION FROM  
DART AEROSPACE LTD.

B	07.03.16	UPDATE DIMS AS MFG., PRIME INSIDE
A	01.01.10	NEW ISSUE
DESIGN	<i>GP</i>	DRAWN BY <i>PH</i>
CHECKED	<i>H</i>	APPROVED <i>H</i>
DATE	07.03.16	TITLE
		DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
		DRAWING NO. D2893
		REV. B SHEET 1 OF 1
		SCALE 1:1

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries